GROUP ASSESSMENT ITEM COVER SHEET

Student Numbers:	Emails:	FIRST NAMES	FAMILY / LAST NAMES
3 3 0 3 7 8 8	scott.lonsdale99@gmail.com	Scott	Lonsdale
3 3 0 3 2 4 3	benp1999@gmai.com	Ben	Perkins

Course Code

| C | O | M | P | 3 | 9 | 6 | 0 |

Course Title

Games Production

(Example)

| A | B | C | D | 1 | 2 | 3 | 4 |

(Example)

Intro to University

Campus of Study: Callaghan (eg Callaghan, Ourimbah, Port Macquarie)

Assessment Item Title: Game Prototype - Assignment 3   Due Date/Time: 1/11/2020

Tutorial Group (If applicable): ____   Word Count (If applicable): ____

Lecturer/Tutor Name: ____

Extension Granted: ☐ Yes ☐ No   Granted Until: ____

Please attach a copy of your extension approval

NB: STUDENTS MAY EXPECT THAT THIS ASSIGNMENT WILL BE RETURNED WITHIN 3 WEEKS OF THE DUE DATE OF SUBMISSION

Please tick box if applicable

☑ *Students within the Faculty of Business and Law, Faculty of Science, Faculty of Engineering and Built Environment and the School of Nursing and Midwifery:* We verify that we have completed the online Academic Integrity Module and adhered to its principles.

☐ *Students within the School of Education:* We understand that a minimum standard of correct referencing and academic literacy is required to pass all written assignments in the School of Education; and we have read and understood the School of Education *Course Outline Policy Supplement*, which includes important information related to assessment policies and procedures.

We declare that this assessment item is our own work unless otherwise acknowledged and is in accordance with the University's Student Academic Integrity Policy

We certify that this assessment item has not been submitted previously for academic credit in this or any other course. We certify that we have not given a copy or have shown a copy of this assessment item to another student enrolled in the course, other than members of this group.

We acknowledge that the assessor of this assignment may, for the purpose of assessing this assignment:

- Reproduce this assessment item and provide a copy to another member of the Faculty; and/or
- Communicate a copy of this assessment item to a plagiarism checking service (which may then retain a copy of the item on its database for the purpose of future plagiarism checking).
- Submit the assessment item to other forms of plagiarism checking.

We certify that any electronic version of this assessment item that we have submitted or will submit is identical to this paper version.

Turnitin ID:
(if applicable) ____

DATE STAMP HERE

Signature: *Lonsdale*	Date: 1/11/2020
Signature: *Perkins*	Date: 1/11/2020
Signature: ____	Date: ____
Signature: ____	Date: ____
Signature: ____	Date: ____

Insert this way

COMP3960 Prototype Report 2

Scott Lonsdale and Ben Perkins

CODE WE CREATED

Most of the particle effects are customized to suit each scenario. We have animation effects for killing enemies, snow effects and also for the super mode pickup. - Scott

Created PlayButton.cs code for button handling, made vast edits to CharacterController.cs and PlayerMovement.cs. Added hit detection for all triggers and enemies. Coded physics based knockback for the player getting hit, including locking out player movement while the player is taking damage. Added sound effects for certain scenarios. Added health system that is persistent across all level scenes as well as a Keycard pickup in order to access level 3. Keycard status is also persistent through all levels. Coded health pickups as well as a super mode pickup which temporarily increases speed, hit range and hit speed. Animations rigged for both normal and super mode. I also implemented a system that remembers what scene (level) the player was last in, in order to reposition the character in the right spot as you return to level 1 from level 2 in order to get to level 3. - Ben

Created Health.cs and UI.cs. Health.cs is used to draw the health graphic to the players UI canvas. The UI.cs script is what is in charge of saving states between scenes and for knowing where to place the player in the scene contextually. This holds variables for health, keycard status and previous scene number with setters and getters in order to be accessed by each scene's player gameobject. - Ben

Edits were made to PlayerMovement.cs to allow animation triggers to be called when the player is grounded or not, and vast edits were made to PlayerMovement.cs to allow attacking to occur. The code to attack and destroy enemies including anti spam protection (cooldown) and attack length (to make attacking realistic and not occurring at a single point in time only) was custom created for this project. - Ben

Scott Lonsdale (C3303788) & Ben Perkins (C3303243)

Animation Map

This is the animation state diagram we have created for the game. It shows all the transitions between animations including the various attacks, jumping, idling, walking and falling. There are 11 main triggers and variables that are referenced in code to be able to determine when certain state transitions should occur. This is almost twice that of Assignment 2 which had 6. The speed variable determines idle and walking, the isJumping, isCrouching and isFalling booleans are used to determine which attack animation should occur when the kick trigger is called (kick is used for all attacks, as the base attack is a kick). The canFlyKick trigger is used as well, as the isJumping trigger is disabled when the player is in the falling state, but the user is able to fly kick while falling. The isSuper tag is to tell the animator to select super or regular animations based on if the player is currently in the super state. The Hurt trigger is to be able to trigger the hurt animation from code, and the isHurting boolean is so that the animator does not move onto a different animation before the player regains control of the character- Ben
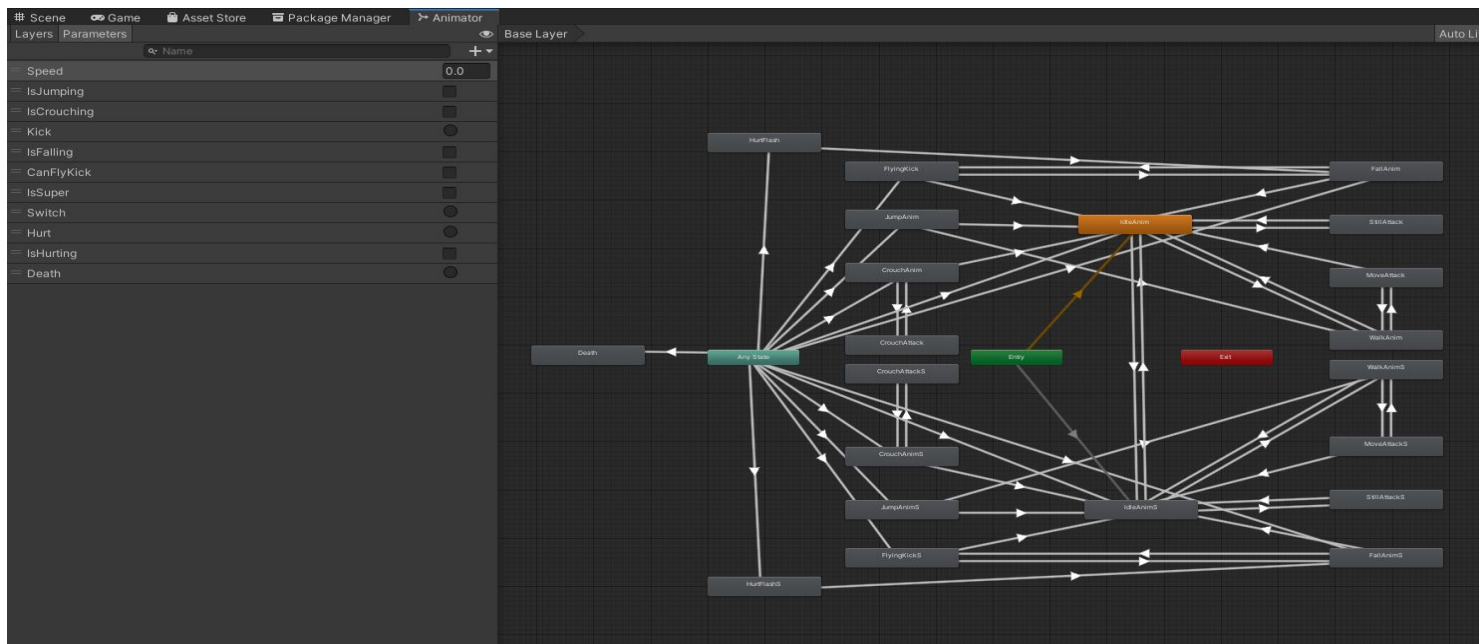
CODE/GUIDES WE REFERENCED

The camera tracking and boundary setting code (BoundaryManager.cs and CameraFollow.cs) was primarily based off of this guide https://www.youtube.com/watch?v=3qfbJ-JSrOc with a few edits. - Scott

Tilemap functionality was implemented mainly from this guide - Scott
https://www.youtube.com/watch?v=ryISV_nH8qw

The character movement (CharacterController2D.cs and PlayerMovement.cs) are primarily based off of this tutorial. https://www.youtube.com/watch?v=dwcT-Dch0bA - Ben

The AI movement (AiPatrol.cs) was based off of this tutorial. - Ben
https://www.youtube.com/watch?v=aRxuKoJH9Y0

Basic parallax framework was based on this tutorial - Scott
https://www.youtube.com/watch?v=zit45k6CUMk

Snow effects and other particle basics was based on this tutorial - Scott
https://www.youtube.com/watch?v=QP8zj-JQgmI

Health system based on this tutorial - Ben
https://www.youtube.com/watch?v=3uyolYVsiWc

Object Persistence implemented using this tutorial - Ben
https://www.youtube.com/watch?v=WchH-JCwVI8&feature=youtu.be&t=1005

ASSETS WE CREATED

The Start Menu and Win Screen Scenes were made for this project - Ben

The Player had its attacking animations modified to suit the flow of the game, e.g made punch attack a walking animation where as standard the character was pictured standing still. - Ben

Made Player super state animations and graphics. -Ben

Modified Portal for background transparency and red colour. - Ben

One layer of the background was created by using parts of the castle sprite sheet to make moon and stars - Scott

Most of the tiles used inside the cave have also been tinted blue to show the cave environment - Scott

Custom on/off door markers - Scott

ASSETS WE REFERENCED
Music/Sound Effects Used

Level Theme - The Revenge of Shinobi - The Shinobi (F-Zero Remix) created by TheLegendofRenegade
https://www.youtube.com/watch?v=yOkNHiZ-0-g
Win Theme - Path Complete from the VVVVVV soundtrack composed by Magnus Pålsson
https://www.youtube.com/watch?v=vRtESvGRCNE
Ristar - Ice Scream (Sonic 3 Remix) created by TheLegendofRenegade
https://www.youtube.com/watch?v=hfmAmIrqb4E
Thunder Force IV - Space Walk (SNES Remix) created by TheLegendofRenegade
https://www.youtube.com/watch?v=YkVM8J3JWpM
Collecting_health.wav by rdaly95
https://freesound.org/people/rdaly95/sounds/387133/
Male_hurt3.ogg by micahlg
https://freesound.org/people/micahlg/sounds/413177/
Jumping_1.wav by ShaneF91
https://freesound.org/people/ShaneF91/sounds/386572/
Small explosion by bevibeldesign
https://freesound.org/people/bevibeldesign/sounds/315826/
Metal_04 by Q.K.
https://freesound.org/people/Q.K./sounds/56254/
Access Denied Buzz by Jacco18
https://freesound.org/people/Jacco18/sounds/419023/
Punch-miss (whoosh) by DrMinky
https://freesound.org/people/DrMinky/sounds/174435/

Textures Used

Metroid-like palette by chipmunk - https://opengameart.org/content/metroid-like
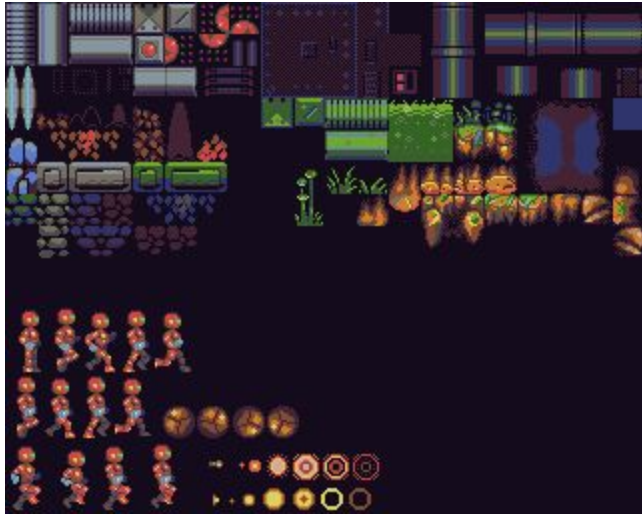
Metroidvania Dark Tile Tileset by The Chayed-
https://opengameart.org/content/metroidvania-dark-platformer-tileset
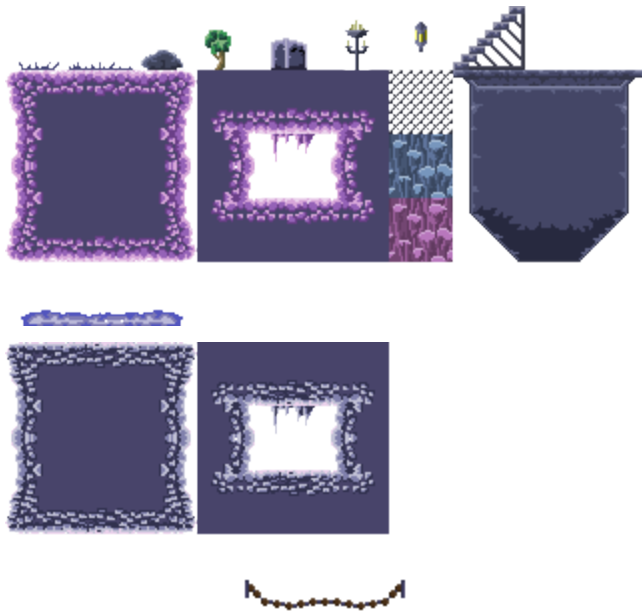
Monk Character by ansimuz (included in the GothicVania Church Pack) - https://opengameart.org/content/gothicvania-church-pack

Baboon Monk by CrisisWorks - https://opengameart.org/content/baboon-monk

Castle Platformer tileset and background by Jetrel - https://opengameart.org/content/castle-platformer
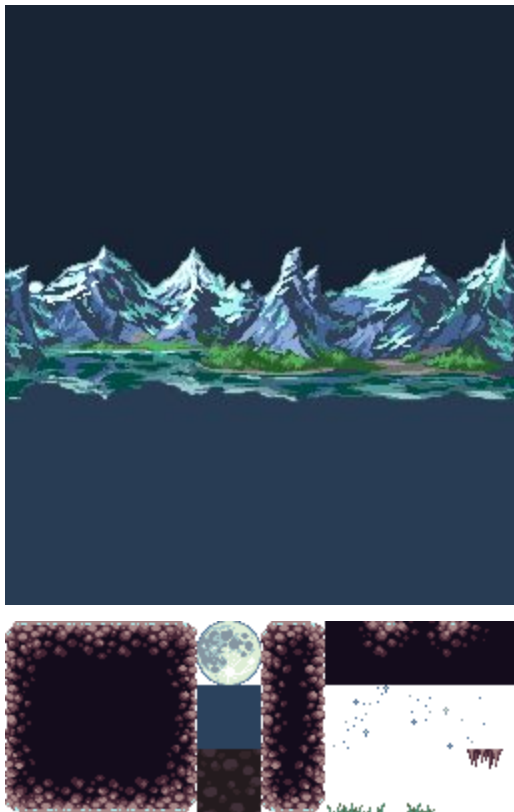
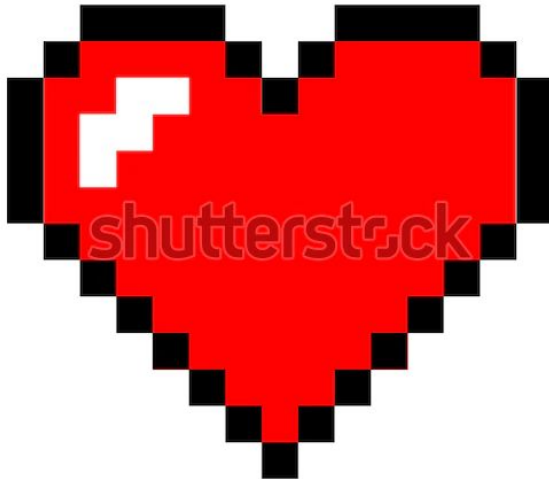Portal animation by Graffe

https://grappe.itch.io/pixelportal
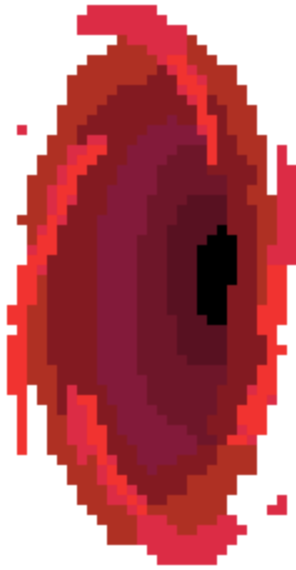
Keycard by Anonymous -

http://pixelartmaker.com/art/192eeafe39eae6a?fbclid=IwAR3WnRLn0rNsa-xrbrKdQnV690gxcl_apxzSnoBJoUJ9YzX6R05XdIR3q7Y
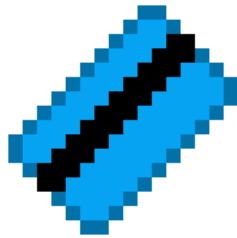
Heart sprite by YellowPixel

Fire Cycle by Anonymous -